

Claims:

1. Method for installing, in a rock wall or roof, a self-drilling expandable rock bolt (2) having a drill bit portion (5), an expansion portion (9) and a connecting portion (10),

- providing, in a rock breaking step, the self-drilling rock bolt (2) with a rock breaking movement and flushing fluid for producing a bore hole, and

- introducing, in an expansion step, pressurized expansion fluid into the expansion portion (9) in order to expand it so as to be fixed to the inside of the bore hole,

characterized in introducing the expansion fluid by means of a swiveling device (6), which is arranged to co-operate with an outward surface (36) at the region of the connecting portion (10) during installation of the rock bolt, so that, in an inactive state of the swiveling device, the rock bolt (2) is free to move during the rock breaking step, and in an active state of the swiveling device, tightening it against the rock bolt (2) in the expansion step in such a way that a sealed channel for expansion fluid is established between an expansion fluid source and the expansion portion (9).

2. Method according to claim 1, wherein tightening of the swiveling device (6) against the rock bolt (2) is accomplished by pressure fluid acting on a sealing device (14,15,17,18).

3. Method according to claim 2, wherein the sealing device (14,15,17,18) seals on two axial sides of a rock bolt expansion fluid inlet (29).

4. Method according to claim 2 or 3, wherein expansion fluid is used for tightening.

5. Method according to any one of claims 2 - 4, wherein tightening is accomplished by pressure fluid acting on a piston device (17).

6. Method according to claim 5, wherein the piston device (17) co-operates with a sealing device (14,15,17,18) with two separated sealing rings.

7. Device for installing in a rock wall or roof a self-drilling expandable rock bolt (2) having a drill bit portion (5), an expansion portion (9) and a connecting portion (10), including

- means for introducing pressurized expansion fluid into the expansion portion in order to expand it so as to be fixed to the inside of the bore hole in an expansion step,

characterized in that the means for introducing pressurized expansion fluid includes a swiveling device (6), which is arranged to co-operate with an outward surface (36) at the region of the connecting portion (10) during installation so that, in an inactive state of the swiveling device (6), the rock bolt (2) is free to move during a rock breaking step, and which, in an active state of the swiveling device (6), is tighten able against the rock bolt (2) in the expansion step in such a way that a sealed channel for expansion fluid is established between an expansion fluid source and the expansion portion (9).

8. Device according to claim 7, wherein the swiveling device (6) includes a sealing device (14,15,17,18) for pressure fluid to act on upon tightening of the swiveling device (6).

9. Device according to claim 8, wherein the sealing device (14,15,17,18) is arranged to seal on two axial sides of a rock bolt expansion fluid inlet (29).
10. Device according to claim 8 or 9, wherein the sealing device (14,15,17,18) is tighten able by means of expansion fluid.
11. Device according to any one of the claims 8 - 10, wherein a piston device (17) is acted on upon tightening.
12. Device according to claim 11, wherein the piston device (17) co-operates with a sealing device (14,15,17,18) with two separated sealing rings.
13. Self-drilling rock bolt (2) having a drill bit portion (5), an expansion portion (9) and a connecting portion (10), and including a flushing fluid channel (37) and an expansion fluid inlet (29), **characterized in** that the expansion fluid inlet (29) is positioned at a specific location on an outward surface (36) at the region of the connecting portion (10), said surface having radial and axial extensions adapted to co-operate with a swiveling device (6) in such a way that the rock bolt (2) is free to move during a rock breaking step, and that, in an expansion step, a sealed channel for expansion fluid is established between an expansion fluid source and the expansion portion (9) through the expansion fluid inlet (29) by the swiveling device (6) being tighten able against said surface of the rock bolt (2).
14. Self-drilling rock bolt according to claim 13, wherein the surface (36) is circular cylindrical.

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